

April 19, 2006

4088053173 02

Ms. Joan Fleck California Regional Water Quality Control Board North Coast Region 5550 Skylane Blvd., Suite A Santa Rosa, California 95403

Quarterly Groundwater Monitoring and Sampling – Case No. R1-2004-0019 First Quarter 2006 City of Santa Rosa Parking Garage 9 Santa Rosa, California

Dear Ms. Fleck:

MACTEC Engineering and Consulting, Inc. (MACTEC) is pleased to present the results of quarterly groundwater monitoring and sampling (First Quarter 2006) for the City of Santa Rosa Parking Garage 9, located at the intersection of 2nd and D Streets in downtown Santa Rosa (Site; Figure 1). This investigation was conducted on behalf of the City of Santa Rosa (the City) in response to a letter to the City dated December 27, 2004, from the Regional Water Quality Control Board (RWQCB). In this letter, the RWQCB requested that the City implement Monitoring & Reporting Program No. R1-2004-0019 to assess and monitor the extent of petroleum hydrocarbons associated with four underground storage tanks that were abandoned in place at the site.

QUARTERLY MONITORING

On March 23, 2006, MACTEC performed groundwater monitoring, purging, and sampling of six onsite groundwater monitoring wells (MW-1 through MW-6). Prior to sampling, depth to water (DTW) measurements were collected from the monitoring wells using a calibrated electronic sounder. DTW measurements were utilized to calculate the groundwater elevation relative to mean sea level and to determine the groundwater flow direction and gradient.

All groundwater monitoring wells were purged of a minimum of three well volumes using a clean PVC bailer. Conductivity, pH, temperature, and turbidity were measured at regular intervals and recorded on the attached well sampling forms (Appendix A). Groundwater samples were collected from monitoring wells MW-1 through MW-6 after purging, using a stainless steel bailer for each well and decanting

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groundwater into clean sample containers provided by the laboratory. All samples were stored on ice and transported under chain of custody control to a California State Certified laboratory for analysis.

Prior to use, all well purging equipment was steam cleaned and rinsed with deionized water at the MACTEC equipment yard. Well purge water was temporarily stored onsite in 55-gallon drums pending receipt of analytical results.

Laboratory Analysis

Groundwater samples were analyzed for the following compounds:

- Total petroleum hydrocarbons (TPH) as gasoline (g) using EPA Method 8015M;
- TPH as diesel (d) using EPA Method 8015M with silica gel strip (EPA Method 3630C); and
- Benzene, toluene, ethyl-benzene, total xylenes (BTEX), 1,2-dichloroethane (1,2-DCA), and ethyl-dibromide (EDB) by EPA Method 8260B.

All samples were analyzed at Sequoia Analytical Laboratory (Sequoia), Morgan Hill, California. Sequoia is a hazardous materials testing laboratory certified by the California Department of Health Services for the analyses requested through the Environmental Laboratory Accreditation Program (ELAP).

RESULTS

Groundwater Flow

For the first quarter 2006, DTW measurements ranged from 9.95 to 13.02 feet below ground surface (bgs) and the groundwater direction at the Site was generally to the southwest at an approximate gradient of 0.005 foot per foot. Table 1 presents groundwater elevations from March 23, 2006, and Figure 2 presents a groundwater contour map.

Laboratory Results

The laboratory analytical reports for groundwater samples submitted for chemical analysis are presented in Appendix B. Table 1 summarizes the analytical results for the groundwater samples collected during this and previous sampling events. Figure 3 presents results for this current quarter. The detected results were as follows:

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- TPHg was detected at concentrations of 3,200, 7,600, 79,000, and 640 micrograms per liter (μg/L) in samples collected from Wells MW-1, MW-3, MW-4, and MW-6, respectively. A duplicate groundwater sample was also collected from MW-1 and TPHg was reported at 3,900 μg/L.
- TPHd was detected in all the wells at concentrations between 53 and 10,000 μg/L. A duplicate groundwater sample was also collected from MW-1 and results were reported at 2,300 μg/L.
- Benzene was detected at concentrations of 1.1, 110, 6,000 and 1.1 μg/L in samples collected from Wells MW-1, MW-3, MW-4, and MW-6 respectively. Benzene was not detected in the duplicate sample taken from MW-1; however, the reporting limit for the duplicate sample was elevated (2.5 μg/L).
- Toluene was detected at concentrations of 1.1 and 4,300 μg/L in samples collected from Wells MW-1 and MW-4, respectively. Toluene was not detected in the duplicate sample taken from MW-1; however, the reporting limit for the duplicate sample was elevated (2.5 μg/L).
- Ethylbenzene was detected at concentrations of 83, 250, 5,300, and 0.63 μg/L in samples collected from Wells MW-1, MW-3, MW-4, and MW-6, respectively. Ethylbenzene in the duplicate sample from MW-1 was reported at 94 μg/L.
- Total xylenes were detected at concentrations of 58, 36, and 23,000 μg/L in samples collected from MW-1, MW-3, and MW-4 respectively. Total xylenes in the duplicate sample from MW-1 were reported at 63 μg/L.
- 1,2-DCA and EDB were not detected above laboratory reporting limits in collected samples.

DISCUSSION

Groundwater results from the first quarter 2006 monitoring event are generally consistent with previous sampling events. The highest detected hydrocarbon concentrations were reported for the groundwater sample collected from MW-4.

LIMITATIONS

This document was prepared by MACTEC at the direction of the City for the sole use of the City and the California Regional Water Quality Control Board, the only intended beneficiaries of this work. No other party should rely on the information contained herein without the prior written consent of MACTEC.

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We trust this report provides the information required at this time. Please feel free to contact Gary Lieberman at (707) 793-3858 if you have questions.

Yours very truly,

MACTEC Engineering & Consulting, Inc.

Gary A. Lieberman Senior Geologist

Susan K. Panttaja, P.

Senior Geologist

SUBMIK PEGICO PARTITALIA No. 8074

GAL/SKP/mlb:MB61709_1Q-06.DOC-Santa Rosa

Attachments: Table 1 – Groundwater Elevation and Analytical Data

Figure 1 – Area Map with Site Location

Figure 2 - Groundwater Contours and Flow Direction - March 23, 2006

Figure 3 – Groundwater Analytical Results – March 23, 2006

Appendix A – Well Sampling Forms

Appendix B – Laboratory Analytical Report

cc: Richard Nosker, City of Santa Rosa

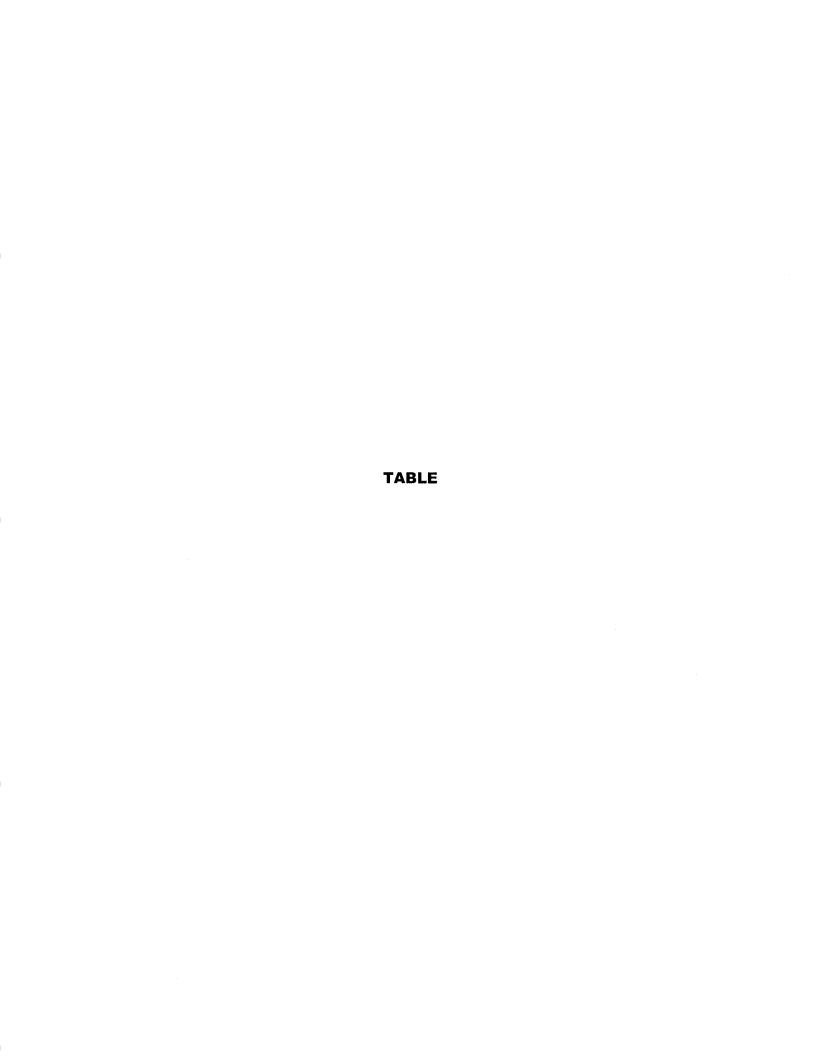


Table 1: Groundwater Elevation and Analytical Data Parking Garage 9 City of Santa Rosa Santa Rosa, California

Well Number	Sample Date	TOC (feet relative to msl)	DTW (feet below TOC)	Groundwater Elevation (feet relative to msl)	TPHg (µg/l)	TPHd (µg/l)	Benzene (μg/l)	Toluene (µg/l)	Ethyl- benzene (µg/I)	Total Xylenes (µg/l)	1,2-DCA (µg/l)	EDB (µg/l)	Napthalene (µg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV
MW-1	05/22/89	164.38	11.79	152.59	58,000	33,000	990	1,500	280	4,700		726			
	08/23/95	164.38	12.54	151.84	600	600	<0.5	2.6	6.5	21		-	-	144	120
	11/02/95	164.38	13.15	151.23	1,200	840	47	11	15	58			- 	1770	
	02/12/96	164.38	8.89	155.49	13,000	2,700	180	470	480	2,500				2,000	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	05/09/96	164.38	10.97	153.41	19,000	6,400	96	820	760	4,400	-				
	05/15/98	164.38	10.52	153.86	24,000	6,100	36	300	670	3,500	22/				
	05/17/99	164.38	11.42	152.96	3,400	378	7.38	30.9	114	524	-		-	0.47	-189
	12/23/99	(-					-			-	10 00	A rro ni	S 55 5	-
	05/08/00	164.38	11.10	153.28	3,830	958	<25	28.4	129	616			51.9	1.14	250
	08/09/00	164.38	12.90	151.48	1/2021							7	-	0.43	-112
	07/26/01	164.38	13.50	150.88	610	300	<0.5	8.0	8.5	20				(20)	
	12/22/05	164.38	11.70	152.68	1,800	3,800	<2.5	<2.5	31	22	<2.5	<2.5	(=)		
	12/22/05		uplicate Sar		2,800	4,300	<2.5	<2.5	52	34	<2.5	<2.5		-	
	03/23/06	164.38	9.95	154.43	3,200	2,300	1.1	1.1	83	58	<1.0	<1.0	- I	. TT.	
	03/23/06		uplicate Sa	Market Company	3,900	2,300	<2.5	<2.5	94	63	<2.5	<2.5			
MW-2	05/22/89	164.80	11.99	152.81	290	250	<0.5	<0.5	2.1	9,700		2000			
	08/23/95	164.80	12.75	152.05	<50	<50	<0.5	<0.5	0.6	<0.5					
	11/02/95	164.80	13.26	151.54	<50	<50	<0.5	<0.5	<0.5	<0.5		7/24			
	02/12/96	164.80	8.88	155.92	260	160	1.3	<0.5	7.8	7.2					1000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	05/09/96	164.80	11.24	153.56	110	80	0.7	<0.5	2.7	1.8	-	200	-		1975
	05/15/98	164.80	10.89	153.91	80	130	<0.5	<0.5	1.1	<1.0				-	
	05/17/99	164.80	11.72	153.08	<50	<50	<0.5	<0.5	<0.5	<0.5			D	1.06	293
	12/23/99						-	-				- 22		7.42	183
	05/08/00	164.80	12.44	152.36	<50	<50	<1.0	<1.0	<1.0	1.21	77	-	1.57	11.92	182
	08/09/00	164.80	13.84	150.96						1 00 1			-	6.27	151
	07/26/01	164.80	14.11	150.69	<50	<50	<0.5	<0.5	<0.5	1.2			:		
	12/22/05	164.80	12.21	152.59	<50	<47	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	194		2.44C
	03/23/06	164.80	10.45	154.35	<50	130	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
MW-3	05/22/89	164.69	12.15	152.54	49,000	17,000	650	660	1,300	3,500	-	-	3 49		
	08/23/95	164.69	12.96	151.73	25,000	12,000	660	<0.5	2,400	4,900					
	11/02/95	164.69	13.42	151.27	24,000	3,300	490	190	2,400	4,900			-		
	02/12/96	164.69	9.14	155.55	32,000	9,900	430	<0.5	2,200	580		-	-		-
	05/09/96	164.69	11.41	153.28	32,000	8,500	440	110	2,200	4,300					-
	05/15/98	164.69	11.11	153.58	24,000	8,200	540	11	1,400	1,800		=	<u> </u>		
	05/17/99	164.69	11.91	152.78	22,400	4,880	716	<0.5	1,220	1,000				1.84	64
	12/23/99		-		- t -		577		-		-		-	2	2
	05/08/00	164.69	12.06	152.63	22,600	4,880	450	<100	1,130	1,413	355		604	13.34	130
	08/09/00	164.69	13.62	151.07		-					-		-	0.23	-033
+1	07/26/01	164.69	14.33	150.36	6,900	2,700	240	3.2	210	110		22			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	12/22/05	164.69	12.55	152.14	12,000	4,700	93	<5.0	550	200	<5.0	<5.0	-		-
	03/23/06	164.69	10.57	154.12	7,600	4,300	110	<5.0	250	36	<5.0	<5.0		-	

Table 1: Groundwater Elevation and Analytical Data Parking Garage 9 City of Santa Rosa Santa Rosa, California

Well Number	Sample Date	TOC (feet relative to msl)	DTW (feet below TOC)	Groundwater Elevation (feet relative to msl)	TPHg (µg/l)	TPHd (µg/l)	Benzene (µg/l)	Toluene (μg/l)	Ethyl- benzene (µg/I)	Total Xylenes (µg/l)	1,2-DCA (μg/l)	EDB (µg/l)	Napthalene (μg/l)	Dissolved Oxygen (mg/l)	Oxidation Reduction Potential (mV)
MW-4	08/22/95	164.68	13.10	151.58	87,000	20,000	6,300	12,000	3,400	18,000	-				1
	11/02/95	164.68	13.75	150.93	79,000	10,000	9,000	18,000	3,400	16,000	-		<u> </u>		
	02/12/96	164.68	9.71	154.97	150,000	9,800	14,000	18,000	4,400	21,000					-
	05/09/96	164.68	11.68	153.00	100,000	11,000	13,000	14,000	3,200	13,000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-		I	
	05/15/98	164.68	11.53	153.15	170,000	8,900	15,000	17,000	7,100	29,000				-	
	05/17/99	164.68	12.25	152.43	190,000	10,000	18,000	20,000	8,000	33,000		- 1 1 4 1 -	W.M. T-883	0.95	38
	12/23/99		-	-		-		(##)	497	25	0.44			1.65	-22
	05/08/00	164.68	12.21	152.47	95,700	4,360	7,870	12,900	3,540	20,120	-	N- 3 20	763	0.37	258
	08/09/00	164.68	13.87	150.81	56,700	2,740	5,890	7,630	2,120	13,500			654	0.11	-090
	07/26/01	164.68	14.37	150.31	490	3,700	3,800	4,400	1,600	9,900		-	1 1-11-M		
	12/22/05	164.68	13.17	151.51	66,000	6,600	3,100	2,200	2,900	12,000	<50	<50			
	03/23/06	164.68	10.96	153.72	79,000	10,000	6,000	4,300	5,300	23,000	<50	<50			
MW-5	08/22/95	164.59	13.27	151.32	<50	210	<0.5	<0.5	<0.5	<0.5					<u>-</u>
	11/02/95	164.59	13.83	150.76	<50	<50	<0.5	<0.5	<0.5	<0.5					
	02/12/96	164.59	10.00	154.59	<50	<50	<0.5	<0.5	<0.5	<0.5		1000	12-2	22	
	05/09/96	164.59	11.92	152.67	<50	<50	<0.5	<0.5	<0.5	<0.5		-			===
	05/15/98	164.59	11.55	153.04	<50	170	<0.5	<0.5	<0.5	<1.0					
	05/17/99	164.59	12.34	152.25	<50	<50	<0.5	<0.5	<0.5	<0.5			-	0.25	187
	12/23/99			THE VALUE OF THE		248					-		<u></u>	1.63	170
	05/08/00	164.59	12.04	152.55	<50	<50	<1.0	<1.0	<1.0	<1.0	-		<1.0	2.47	308
	08/09/00	164.59	13.56	151.03		(100)			-	-			1 577	0.3	139
	07/26/01	164.59	14.13	150.46	<50	<50	<0.5	<0.5	<0.5	<0.5			:Ex		1 1 1 1 1 2 1 1 1 1
	12/22/05	164.59	12.55	152.04	<50	86	<0.50	< 0.50	< 0.50	<0.50	<0.50	< 0.50		T	
METERS BY	03/23/06	164.59	11.08	153.51	<50	53	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50			
MW-6	08/22/95	166.45	15.23	151.22	2,100	820	<0.5	7.2	9.8	9.8					
	11/02/95	166.45	15.88	150.57	710	240	2	<0.5	3.5	5.4					
	02/12/96	166.45	11.94	154.51	320	180	<0.5	0.6	4.4	1	222	1		-	## (
	05/09/96	166.45	13.83	152.62	200	130	<0.5	<0.5	1	<0.5	-				<u></u>
	05/15/98	166.45	13.64	152.81	150	250	<0.5	<0.5	<0.5	<1.0		7-7/			 ,
	05/17/99	166.45	14.34	152.11	140	113	<0.5	<0.5	<0.5	<0.5			- L	9.67	230
	12/23/99								V					6.44	132
	05/08/00	166.45	14.03	152.42	< 0.05	. 58	<1.0	<1.0	<1.0	<1.0			1.32	1.37	306
	08/09/00	166.45	15.65	150.80			-	5 75 5	-			-		0.36	100
	07/26/01	166.45	16.33	150.12	570	290	6.1	<0.5	0.61	<0.5	mod an		-		
	12/22/05	166.45	14.94	151.51	380	100	<0.50	2.8	<0.50	<0.50	<0.50	<0.50			
	3/23/2006	166.45	13.02	153.43	640	430	1.1	<0.50	0.63	<0.50	<0.50	<0.50			Her Land

Notes:

TOC = top of casing elevation

DTW = depth to water

msl = mean sea level TPHg = total petroleum hydrocarbons as gasoline

= total petroleum hydrocarbons as diesel **TPHd**

1,2-DCA = 1,2-Dichloroethane **EDB** = 1,2-Dibromoethane

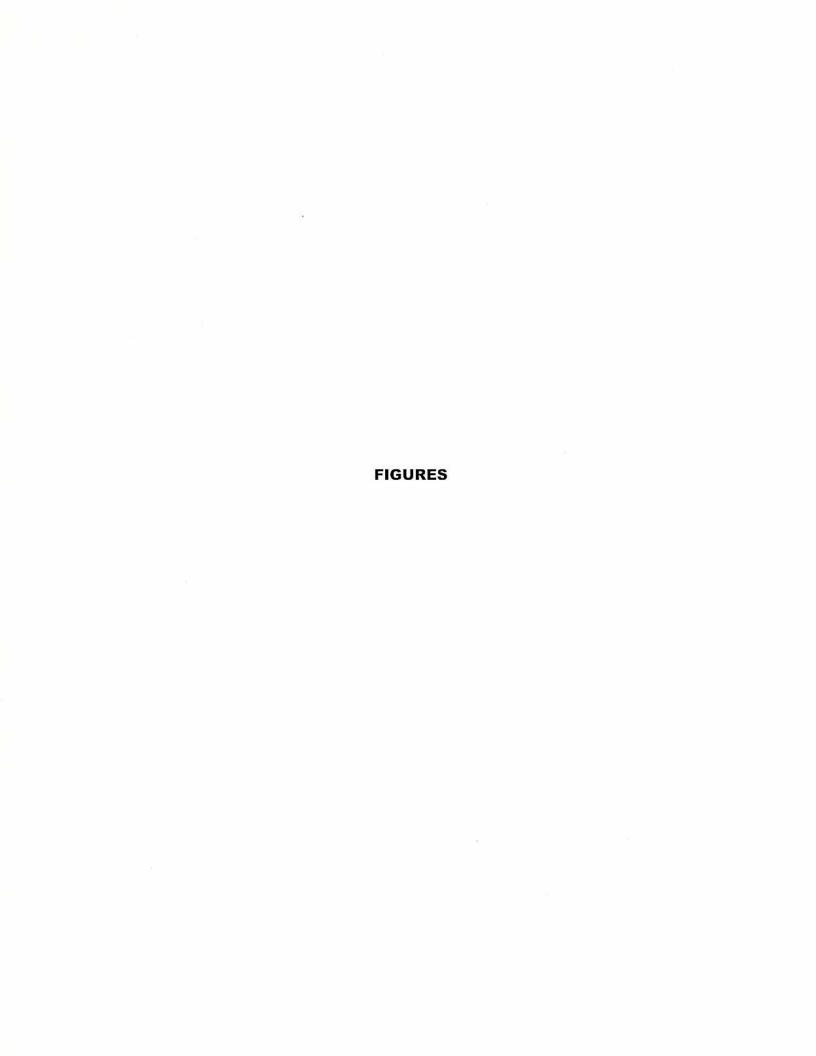
= micrograms per liter µg/l <

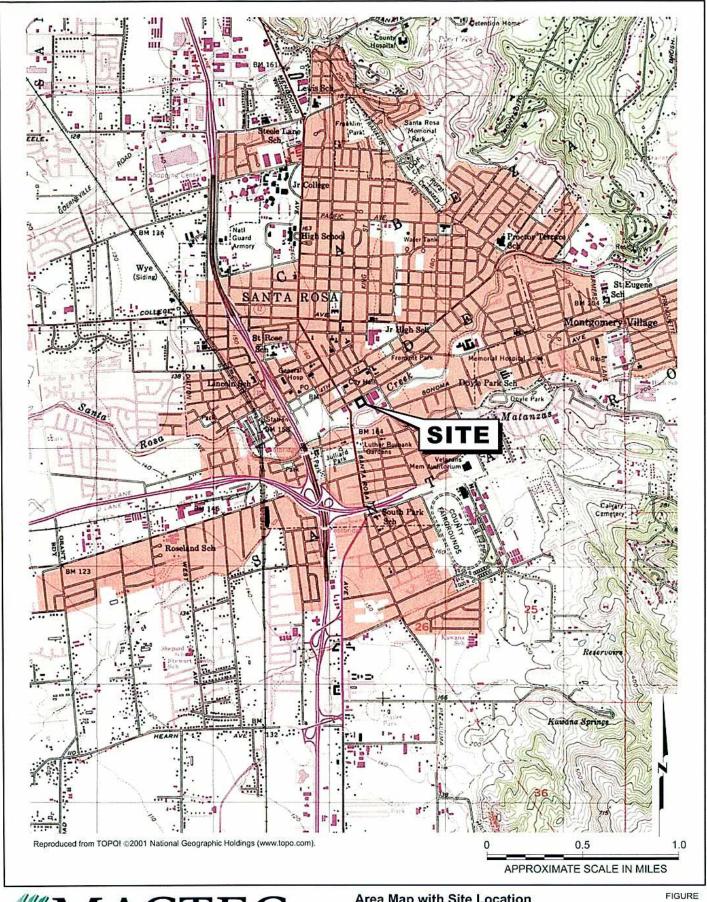
= less than the laboratory reporting limit

= milligrams per liter mg/l

mV = millivolts

Checked <u>SKP</u> Approved <u>4/31/</u>06/6*AL*







Area Map with Site Location

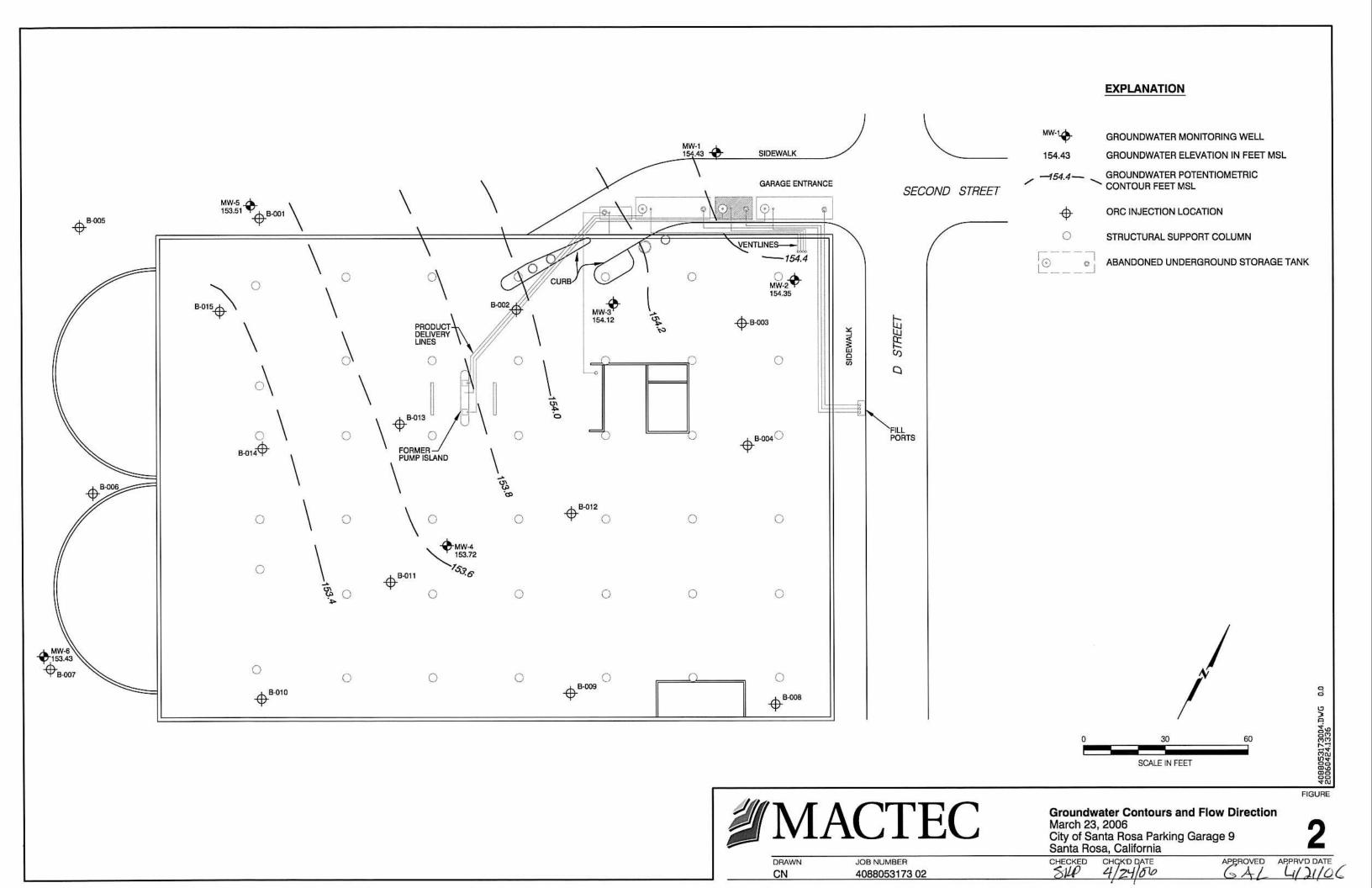
March 23, 2006 City of Santa Rosa Parking Garage 9 Santa Rosa, California

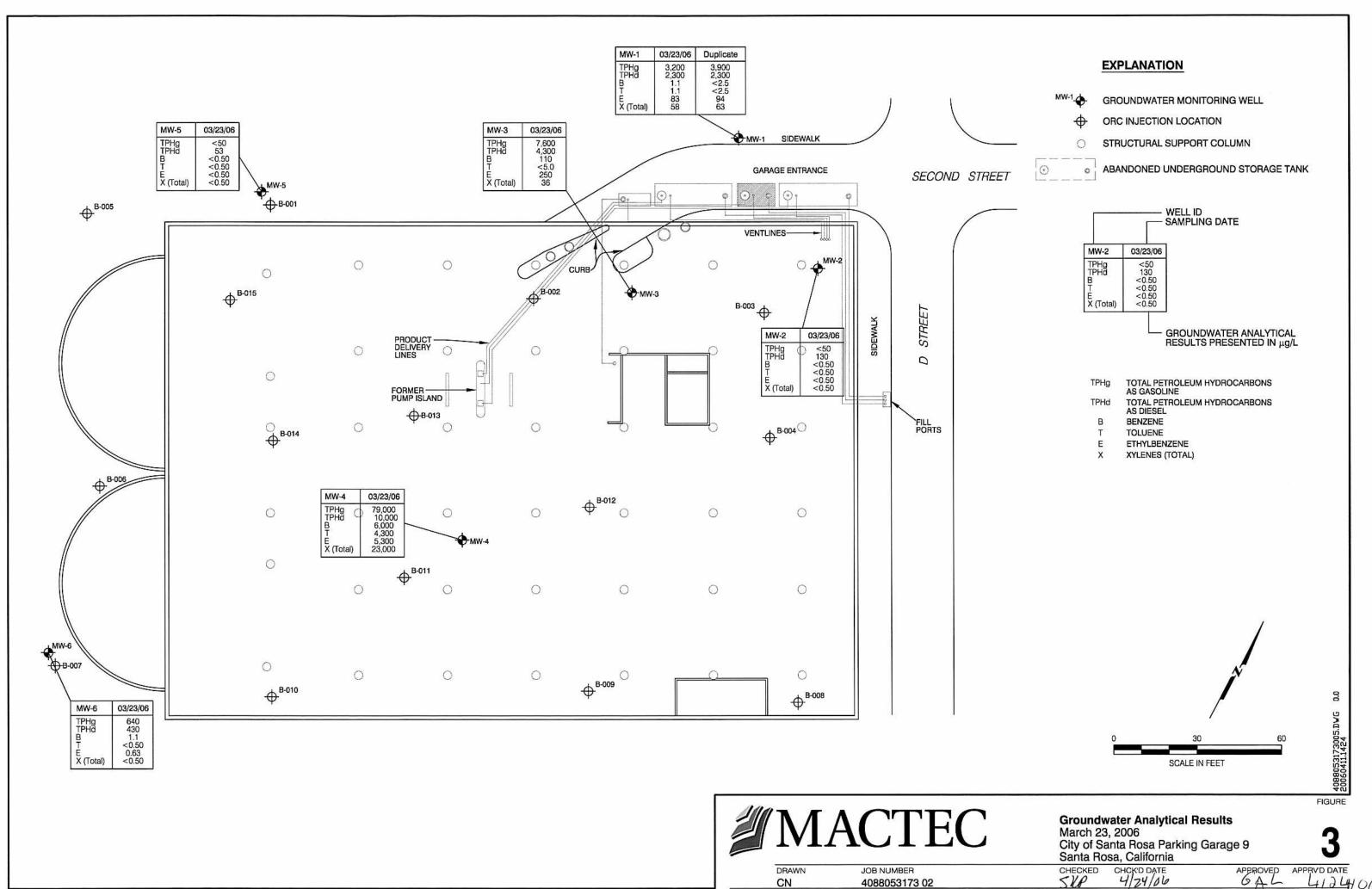
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JOB NUMBER CN 4088053173 02

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APPROVED APPRVD DATE 4124106

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APPENDIX A WELL SAMPLING FORMS



	VI				Well Number:	MW-4		
					Well Type:	Monitor	Extraction	Other
lob Name:	P	arking Garage 9)			x PVC	St. Steel	Other
ob Number:			4088053173	,	Date: 3-23-06_	· · · · · · · · · · · · · · · · · · ·		
Recorded By	':	The Sign	nature)		Sampled By:		JHD (initials)	
			Taure)	WELL DUR				
				WELL PURC				
itial Time:	1500	TER CALIBRAT	ION THE		(17.7 - 10.96)		IME CALCULATIO	
					TD (feet) WL (Feet)	D (inches)		culated Purge Volume
_	13567×	= =		10		A	? ^	
	7920249			1000	Purge Start: _	073		GPM:
urb S/N <u>93</u>	9097	0 - 10 <u>x</u>	10 - 100 x	100 - 1,000		075 20	<u> </u>	GPM:
	1530				Elapsed: _			Volume: 3,
inal Time: H	_	4 x]7	10		PURG	E METHOD	
C			std <i>[C</i>	_	Bailer - Type:	PU	Control of the Contro	
urb	x		10 - 100 x	-	Submersible - Typ			
ield Paramete		_, ,,	, <u></u>].00 /,000	Other - Type:		11.00	
Coal			_ v°c					
Minutes	pН	Conductivity		Turbidity (NTU)		PUMP INT	AKE SETTING	
Initial	6.30	927	15.9	678	Near Bottom		Near Top	
15	6.31	938	15.9	>1000	Other			
	6.36	946	16.1	>1000	Depth in feet (BTOC)			
1,5	6.41	954	16.2	21000	Screen Interval in fee	, ,	from	to
7	6.41	948	16.1	>1000	Observations During	A	^	
2,5	6.37	944	16,2	71000	22002 cg		•	<u>e</u> –
3,25	6.38	(13	16.2	7(06,0	dark bed	own /b)	ack	
					Discharge Water Disc	oosal:	Sanitary Sev	ver
					Storm Sewer		X Other _	Tank #
				WELLSAMP	PING	eim (Ba		
Bailer - Type		vanininna Canal		Annual Control of the	3/23/2006		0800	报号 · 当院《超》 · · · · · · · · · · · · · · · · · · ·
Bailer - Type		Stainless Steel		_ Sample Time: ysis Requested	Preservatives	1 1 2		
PRE-PURG	ple No. E	Volume/Cont.	Anai	ysis requested	Preservatives	Lab	1 00	omments
POST-PUR								
06122	301	6 VOAs	BTEX / TPH-0	Gas	HCL	C&T		
11		2 - 1L Amber	TPH-Diesel		none	C&T		
			(/////	UALITY CONTRO	LSAMPLES			
0.1-11	Duplicate	•	amala Na	Tima	Blank Samples	No	1 1	r Samples
Original S	Sample No.	Duplicate Sa	imple No.	Туре	Sample	INU.	Type	Sample No.



	ΨΤ	\mathbf{U} .	نلل		Well Number:	MW-3		
		-			Well Type:	x Monitor	Extraction	Other
Job Name:		Parking Garage	9	·		x PVC	St. Steel	Other
lob Number:		11/11/11	408805317	3	Date: 3-23-06			
Recorded By		131 Mgs	ignature)	······································	Sampled By:		JHD (initials)	
				WELL PUR	GING			
	- III M	ETER CALIBRA	TION			PURGE VOLU	ME CALCULATION	i i i i i i i i i i i i i i i i i i i
nitial Time:		500			(19.6 - 10,57		A CONTRACTOR OF THE PROPERTY O	
ьн s/n <u>//</u>	3562 5	(4 X	7	10	TD (feet) WL (Feet)	D (inches)	# Vols Calcu	ilated Purge Volume
		= =	٦ ٦		Purge Start:	08/5	, _	GPM:
	100000			100G x 100 - 1,000	Purge Stop:		_	GPM:
und 0111	9097			100 1,000	Elapsed:			Volume: 4/
inal Time:	150	30						
Н	>	4 x	7	10		PURG	E METHOD	
EC .		redline x	STD _ <i>10</i>	00	Bailer - Type:	PVC		
Turb	2	(0 - 10 x	10 - 100	x 100 - 1,000	Submersible - Ty	•		
ield Paramete	ers				Other - Type:			
Minutes	-11	Considerate day	Z (V		2、原达点(水流)(hh			
Minutes	pH	Conductivity		°F Turbidity (NTU)		PUMP IN LA	KE SETTING	
Initial /	6.73	8/8	15.0	290	Near Bottom		Near Top	
115	-	841	15,8	310	Other			
	6.67	842	159		Depth in feet (BTOC			
2 -	6.68			226	Screen Interval in fe		from	to
2.5	6170	845 8 39	15.9	238	Observations During		Condition, Turbidity	, Color, Odor):
3,5	6,65		15,9	389	1,4ht bro	∞		
4,35	6,66	842	15,8	288				va
	· · · · · · · · · · · · · · · · · · ·	3/2	+		Discharge Water Dis	sposal:	Sanitary Sewe	ır
					Storm Sewer		X Other	Tank#
				WELL SAM				
¬p-″ -		04-1-1				() 基本体() (B) () (*****************************		
Bailer - Type		Stainless Steel	1 ^-	Sample Time:	3/23/2006		340	
PRE-PURG	ole No. E	Volume/Cont.	. j An	alysis Requested	Preservatives	Lab	Com	ments
POST-PUR		0.1/0.4-	DTEV (TD)	10	1101	007		
00122	30 2	6 VOAs 2 - 1L Amber	BTEX / TPH TPH-Diesel	-Gas	HCL none	C&T C&T		
		_	1					
				OUAL ITY COUTES		Principle Comment		ikar ing didaktyo sasalikar extilatasaillis i
	Duplicate	Samples		QUALITY CONTRO	Blank Samples] Out-	Romalas
Original S	Sample No.	Duplicate S	ample No.	Type	Sample	No.	Type	Samples Sample No.
							.,,,,	30,510 110.
							l	

Reviewed by:

C:\Documents and Settings\jhanzel-durbin.MACTE**OM/GJEEn Engineering & Forest Hing**er Inggett\Bldg 194\B194_Fiel@ates November 2005.xls



Well Type:				ילבל		Well Number:	MW-2		
Date: 3-23-06 Sampled By:						Well Type: x	Monitor	Extraction	Other_
Sampled By: JHD	Name:	P:	arking Garage 9)		x	PVC	St. Steel	Other
WELL PURGING	Number	:	11 11	4088053173		Date: 3-23-06			
NETER CALIBRATION Section Sect	orded By	i suti,		<u> </u>		Sampled By:			
NETER CALIBRATION			- (SK	mature)				(andais)	
Time: 1500	11 25. 1				WELL PUR				
SAN				ION					
SN	al Time:	1500)			• =		•	_
b SN \$5100000	s/n 🚣	3562 x	4 x]7]10				
Sample No. Polyge Purple	s/n 2	160249	redline x	STD _	1600	Purge Start:			GPM:
Time: 1530	> S/N <i>9</i>		0 - 10 x	10 - 100 x	100 - 1,000	Purge Stop:			
X						Elapsed:	25		Volume:
redine x STD	al Time:			J	1				
Submersible - Type:		<u> x</u>		-	_			METHOD	
Dump Conductivity Temp.				_	_				
Mainuse		-	0 - 10 x	10 - 100 x	<u> </u> 100 - 1,000				
Near Bottom Near Top Near Bottom Near Top Near Bottom Near Top Near Bottom Near Top Other	d Paramet	ers			<u>, </u>	Other - Type:			***************************************
Near Bottom	Cal	На	Conductivity		i i		PUMP INTAK	ESETTING	
25									2
				160.4			L.		
185 6, 79 504 6, 5 823 Screen Interval in feet (BTOC): from					1	_			
Observations During Purging (Well Condition, Turbidity, Color, Odor);	-	i -					BTOC):	from	to
				Τ΄,				-	
Discharge Water Disposal: Samitary Sewer X Other Tank # WELL SAMPLING Bailer - Type: Stainless Steel Sample Time: 3/23/2006 0.7.30 Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples		1		1 7			1	, 1	
Discharge Water Disposal: Storm Sewer WELL SAMPLING Sample No. Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE QUALITY CONTROL SAMPLES Duplicate Samples Discharge Water Disposal: Sanitary Sewer X Other Tank # Tank # WELL SAMPLING Analysis Requested Preservatives Lab Comments C&T QUALITY CONTROL SAMPLES Duplicate Samples Discharge Water Disposal: Sanitary Sewer X Other Tank # Analysis Requested Preservatives Lab Comments C&T Other Samples		i	,	1		J			
WELL SAMPLING Bailier - Type: Stainless Steel Sample Time: 3/23/2006 0730 Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE OG/12.23.03 6 VOAs BTEX/TPH-Gas HCL C&T V 2-1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples	, , , =							_	
Bailer - Type: Stainless Steel Sample Time: 3/23/2006 0.7.3 Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE OG / 2 23 0.3 6 VOAs BTEX / TPH-Gas HCL C&T U 2-1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples							L		er
Bailer - Type: Stainless Steel Sample Time: 3/23/2006 0730 Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE ACL 2 2 3 0 3 6 VOAs BTEX / TPH-Gas HCL C&T 2 - 1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples						Storm Sewer	L	X Other	Tank #
Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE O(L) 2 23 03 6 VOAs BTEX / TPH-Gas HCL C&T V 2-1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples	False				WELL SAM	PLING			
Sample No. Volume/Cont. Analysis Requested Preservatives Lab Comments PRE-PURGE POST-PURGE A(L) 2 23 03 6 VOAs BTEX / TPH-Gas HCL C&T 2 - 1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples	Bailer - Typ	oe: S	tainless Steel		_Sample Time:	3/23/2006	09.	30	
POST-PURGE POST-PURGE OCIZZSOS 6 VOAS BTEX/TPH-Gas HCL C&T 1 2-1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples				Anal	vsis Requested	Preservatives			mments
## Act C&T C&T									
OG / 2 23 O 3 6 VOAs BTEX / TPH-Gas HCL C&T U 2-1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples									
OC 12 23 O3 6 VOAs BTEX / TPH-Gas HCL C&T V 2 - 1L Amber TPH-Diesel none C&T QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples	~~~~								
QUALITY CONTROL SAMPLES Duplicate Samples Duplicate Samples Duplicate Samples Duplicate Samples Other Samples Othe	POST-PUF	RGE							
QUALITY CONTROL SAMPLES Duplicate Samples Blank Samples Other Samples	0612	2303			Gas				
Duplicate Samples Blank Samples Other Samples			2 - 1L Amber	I PH-Diesei		none	Cal		
Duplicate Samples Blank Samples Other Samples									
Duplicate Samples Blank Samples Other Samples									
Duplicate Samples Blank Samples Other Samples									
Original Sample No. Duplicate Sample No. Type Sample No. Type Sample No.				G	MALITY CONTRO	LSAMPLES			
		Duplicate	Samples	Complete G	WATERES, IRCO	Photo Maria Company of the Company o			220 X 2142
	Original	•	-	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		Blank Samples	o	Other	Samples
	Original	•	-	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		Blank Samples	0.	Other	Samples
	Original	•	-	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		Blank Samples	0.	Other	Samples



	$\mathbf{V}\mathbf{I}\mathcal{L}$				Well Number:	MW-6		
					Well Type:	Monitor	Extraction	Other
Job Name:	Pa	rking Garage 9				x PVC	St. Steel	Other
Job Number:			4088053173		Date: 3-23-06_			
Recorded By	: Lity	A JA (Sig	nature)		Sampled By: _		JHD (initials)	
				WELL PUR	GING			
	ME	TER CALIBRAT	ION			URGE VOLU	ME CALCULATION	
Initial Time:	1500	dina da Pada Sina da Pinda I						gals.
		1 -			TD (feet) WL (Feet)	D (inches)		ulated Purge Volume
	3567 x			10		1365-2	_	
•	76249			000	Purge Start:		-	GPM:
Turb S/N Z⊆	9097]0 - 10 <u>x</u>	10 - 100 x	100 - 1,000		1015		GPM:
	1530				Elapsed:			Volume: <u>5</u>
Final Time:]4 x	17	10		DITEC	EMETHOD	
pH EC	x			200	Bailer - Type:			
			10 - 100 x		Submersible - Type			
Turb Field Paramete		J0 - 10 X	110 - 100 <u>X</u>	100 - 1,000	Other - Type:	<u> </u>		
rieiu raramete	=13	1	√ °C		Galler = Type.			
Minutes	pН	Conductivity		Turbidity (NTU)		PUMP INTA	KE SETTING	
Initial	6,58	720	17,6	464	Near Bottom		Near Top	
1	6,62	728	17,1	501	Other			
Z	6.75	734	16,6	523	Depth in feet (BTOC)):		
3	6,74	722	16.6	833	Screen Interval in fee	et (BTOC):	from	to
4	6,73	723	16,7	925	Observations During	Purging (Well	Condition, Turbidit	y, Color, Odor):
4,5	6,72	723	16,7	>1000	light +	e dail	c brown	
5-	6,73	722	16,7	>1000				
					Discharge Water Dis	noeal:	Sanitary Sew	or.
					Storm Sewer	posai.	X Other	Tank #
	沙罗撒龙			WELLSAM	PLING			"" "我没有什
x Bailer - Typ	e:Sta	ainless Steel		Sample Time:	3/23/2006	10	20	
	ple No.	Volume/Cont.	Analy	sis Requested	Preservatives	Lab	Cor	nments
PRE-PURG	iE							
POST-PUR		6 VOAs	BTEX / TPH-G	as	HCL	C&T		
00/22	307	2 - 1L Amber	TPH-Diesel		none	C&T		
			QI	UALITY CONTRO				
Original	Duplicate S Sample No.	amples Duplicate Sa	mole No	Туре	Blank Samples Sample	No	Other Type	Samples Sample No.
Oliginar	Campie NO.	Duplicate 3a	imple (40.	Туре	Carriple		1,990	Cumple 140.

Reviewed by:_



1 1 V			نالا	1		We	II Numbe	r:	MW-5				
						We	II Type:	x	Monitor		Extraction		Other
lob Name:	Pa	arking Garage 9						х	PVC		St. Steel		Other
ob Number:			408805317	3		Dat	te: 3-23-0	6					
Recorded By:	Att	15 1 1 (Sign	nature)			Saı	npled By	:			JHD (initials)		
				e de la	WEN DUD	CINC		Y.				eller?	
			Section 1		WELL PUR	GING						15.00	<u> </u>
		TER CALIBRAT	ION .					D-0::::::::::::::::::::::::::::::::::::		×	ALCULAT		
nitial Time:	1500					(_19.5	5 - <i>// , 6</i> WL (Fe	-	C_2_2 X 3 D (inches)				gals. ed Purge Volume
oh s/n /357	6Z x	4 x	7 [10	(.00)	(,	_ ()				
C S/N 9960	-	_	STD		1000	Pur	ge Start:		1030				GPM:
Turb S/N 9510					100 - 1,000	Pur	ge Stop:		045	-			GPM:
	097		_			Ela	osed:		15				Volume: 4
inal Time:	150	30											
Н	x	4 x	7		10				PURG	E ME	THOD		X . / /
EC			_		000	Bail	er - Type:		PVC	A PROPERTY OF LABOUR.			
Turb			,		100 - 1,000		mersible -						
		J0 - 10 X	100 - 100	^	100 - 1,000		er - Type:	i ype.					
Field Parameters		1	x.	ای•		O	er - Type.						
Minutes	рН	Conductivity			Turbidity (NTU)			P	UMP INTA	KE S	ETTING	125	
Initial	7.12	3.88.7	1715	-	105	Nea	r Bottom				Near Top		
	108	453.7	17.4	- 1	256	Oth	er						
	7.03	441.5	17.4	i	683	Depth	in feet (BTC	DC):					
2 7	1,02	448,6	17,3	\neg	7/000	Screen	Interval in	feet (B	STOC):		from		to
	.97	458,3			>1000	Obsen	vations Duri	na Pur	raina (Well	Conc	 dition. Turb	idity. (Color, Odor):
	,95	461,1	17,2		>1000	ļ.					,		برس
	,84	465,2		- 1	71000		770	70					<i></i>
-(+-	10:1	. 10 - 1 C										······	· · · · · · · · · · · · · · · · · · ·
	11-(Discha	rge Water I	Dispos	al:		Sanitary S	ewer	
						Sto	rm Sewer			X	Other		Tank #
			k.		WELL SAM	DI INC		116	annen e	1		- X	
			45 A A A A A A A A A A A A A A A A A A A	+ ¥	COURT WAS A STATE OF THE STATE OF THE	LING	0.00.000						
Bailer - Type:		ainless Steel			Sample Time:		3/23/200		, -	5			
Sample N PRE-PURGE	Vo.	Volume/Cont.	Ar	naly	sis Requested		Preservativ	es	Lab			Comm	ents
									-				
POST-PURGE							· · · · · · · · · · · · · · · · · · ·						
0612730	45	6 VOAs	BTEX / TPI	H-G	as	НС	 L		C&T				
V V		2 - 1L Amber	TPH-Diesel			non	е		C&T				
				QL	ALITY CONTRO		~/milioxxxx ~/~***.2000)				h Para		
	Duplicate S	•			-	Blank S	Samples	_1_ 61					amples
Original Sam	pie No.	Duplicate Sa	impie No.		Туре		Sam	ple No	•	1	Туре		Sample No.
										1	l		
	ļ									1	I		



		$oldsymbol{I}oldsymbol{U}oldsymbol{I}$			Well Number:	MW-1		
					Well Type:	Monitor	Extraction	Other_
ob Name:		Parking Garage 9			х	PVC	St. Steel	Other
ob Number	:	1 4 1 2	408805317	3	Date: 3-23-06_			
ecorded By	r: Ja	4/1//	2		Sampled By:		JHD	
nga kalawa ka		(Sigi	nature)			- Anna Maria	(initials)	lien - Alle Santan - Fred
	1 0			WELL PUR				
	9 23-00 (1)	IETER CALIBRAT	ION				ME CALCULATIO	
itial Time:	_/.500_				(_17.2 - <u>9, 95</u>); TD (feet) WL (Feet)	X _2_2 X 3 X D (inches)		gals. culated Purge Volume
H S/N /	3562	x 4 x	7	10	, , , , ,	, ,		·
	920249	redline x	STD _	1000	•	105		GPM:
urb S/N 🤦	<u> 9097</u>	x 0 - 10 x	10 - 100	100 - 1,000	Purge Stop:	11/5	<u> </u>	GPM:
		₹.			Elapsed:	Z &	2	Volume: 3
nal Time:	<u>15€</u>				Terroritation and the state of			and the second of the second o
ŧ	[x 4 x	_	10			METHOD	
0			STD	1000	Bailer - Type:	PVC		
ntp		x 0 - 10 x	10 - 100	100 - 1,000	Submersible - Type	:		
eld Paramet	ers				Other - Type:			
Gal -Minutes	pH	Conductivity	Temp.			PUMP INTA	KE SETTING	
Initial	7,11	356,3		556	Near Bottom	100000000000000000000000000000000000000	Near Top	Angelhari yan sertili. Assiilililililiniss
,5	6,93	372.4		>1000	Other			
1	6,85	380:1	16,1	71000	Depth in feet (BTOC):			
115	6.84	383,1	16,3	> 1000	Screen Interval in feet	(BTOC):	from	to
=	6,86	383,6	16.4	71000	Observations During F		.7	
2 3	6,86	384.5	16,4		Strong of		Condition, Turbid	
-	6,86		16,4	71000	Strong ou		f produ	xct
Z 3	6,86	384.5	16,4	71000	strong ou visible	<i>clor s</i> Sheen	f pracle	of water
Z 3	6,86	384.5	16,4	71000	STYDING OF	<i>clor s</i> Sheen	f produce on top Sanitary Sev	of water
Z 3	6,86	384.5	16,4	71000 71000 71000	STYDING OF	<i>clor s</i> Sheen	f pracle	of water
Z 3	6,86	384.5	16,4	71000	STYDING OF	clor s Sheen osal:	f practices on top Sanitary Sex X Other	of water
Z 3 3,5	6,86 6,87 6,98	384.5	16,4	71000 71000 71000	STYDING OF	<i>clor s</i> Sheen	f practices on top Sanitary Sex X Other	ect S welco
Z 3 3,5	6,86 6,87 6,98 be:	384,5	16,4	>1000 >1000 >1000 WELL SAMI	STYDING OF STYDING	clor s Sheen osal:	F practices on top Sanitary Ser X Other	es wester
Z 3 3,5	6,86 6,87 6,98 be:	384,5 384,7	16,4	>1000 >1000 >1000 WELL SAMI Sample Time:	STYDING OF	clor s Sheen osal:	F practices on top Sanitary Ser X Other	ver Tank#
Z 3 3,5	6,86 6,87 6,98 be:	384,5 384,7	16,4	>1000 >1000 >1000 WELL SAMI Sample Time:	STYDING OF	clor s Sheen osal:	F practices on top Sanitary Ser X Other	ver Tank#
Z 3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98	384,5 384,7	16,4	>1000 >1000 >1000 WELL SAMI Sample Time:	STYDING OF	clor s Sheen osal:	F practices on top Sanitary Ser X Other	ver Tank#
Z 3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384,5 384,7	16,4	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	STYDING OF	clor s Sheen osal:	F practices on top Sanitary Ser X Other	ver Tank#
Z 3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384,5 384,7 Stainless Steel Volume/Cont.	16,4 16,4 16,4	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	Strong or VI'Si Si S	clor s Sheen Dsal:	F practices on top Sanitary Ser X Other	ver Tank#
3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384, 5 384, 7 Stainless Steel Volume/Cont.	16,4 16,4 16,4 BTEX/TPH	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	Strong or VI'Si VI'S Storm Sewer Storm Sewer PLING 3/23/2006 Preservatives	clar s Sheen sal: // 2 Lab C&T	F practices on top Sanitary Ser X Other	ver Tank#
3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384, 5 384, 7 Stainless Steel Volume/Cont.	16,4 16,4 16,4 BTEX/TPH	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	Strong or VI'Si VI'S Storm Sewer Storm Sewer PLING 3/23/2006 Preservatives	clar s Sheen sal: // 2 Lab C&T	F practices on top Sanitary Ser X Other	ver Tank#
Z 3 3 5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384, 5 384, 7 Stainless Steel Volume/Cont.	16,4 16,4 16,4 BTEX/TPH	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	Strong or VI'Si VI'S Storm Sewer Storm Sewer PLING 3/23/2006 Preservatives	clar s Sheen sal: // 2 Lab C&T	F practices on top Sanitary Ser X Other	ver Tank#
3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 De:	384, 5 384, 7 Stainless Steel Volume/Cont.	16,4 16,4 16,4 BTEX/TPH	VELL SAMI Sample Time: allysis Requested	Discharge Water Disposer Storm Sewer PLING 3/23/2006 Preservatives HCL none	clar s Sheen sal: // 2 Lab C&T	F practices on top Sanitary Ser X Other	ver Tank#
3 3,5 Bailer - Typ Sam PRE-PURG	6,86 6,87 6,98 be:	384,5 384,7 Stainless Steel Volume/Cont. 6 VOAs 2 - 1L Amber	16,4 16,4 16,4 BTEX/TPH	>1000 >1000 >1000 >1000 WELL SAMI Sample Time: Palysis Requested	Discharge Water Disposer Storm Sewer PLING 3/23/2006 Preservatives HCL none	clar s Sheen sal: // 2 Lab C&T	F production to product the production of the pr	ver Tank#
Bailer - Typ Sam PRE-PURG POST-PUR CA 1223	6,86 6,87 6,98 be:	384, 5 384, 7 Stainless Steel Volume/Cont.	16,4 16,4 16,4 An BTEX/TPH TPH-Diesei	VELL SAMI Sample Time: allysis Requested	Discharge Water Disposition Storm Sewer PLING 3/23/2006 Preservatives HCL none	clar s Sheen sal: //2 Lab C&T C&T	F production to product the production of the pr	ver Tank #
Bailer - Typ Sam PRE-PURG	be: Duplicate Sample No.	384, 5 384, 7 Stainless Steel Volume/Cont. 6 VOAs 2 - 1L Amber	Arrange No.	VELL SAMI Sample Time: allysis Requested GUALITY CONTRO	Discharge Water Disposition Storm Sewer PLING 3/23/2006 Preservatives HCL none BL SAMPLES Blank Samples	clar s Sheen sal: //2 Lab C&T C&T	F production for the production of the productio	ver Tank #

APPENDIX B LABORATORY ANALYTICAL REPORT



10 April, 2006

Gary Lieberman MACTEC Engineering & Consulting [Petaluma] 5341 Old Redwood Highway, Suite 300 Petaluma, CA 94954

RE: Parking Garage 9 Santa Rosa

Work Order: MPC0855

Enclosed are the results of analyses for samples received by the laboratory on 03/24/06 19:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate #1210





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
06122301	MPC0855-01	Water	03/23/06 08:00	03/24/06 19:20
06122302	MPC0855-02	Water	03/23/06 08:40	03/24/06 19:20
06122303	MPC0855-03	Water	03/23/06 09:30	03/24/06 19:20
06122304	MPC0855-04	Water	03/23/06 10:20	03/24/06 19:20
06122305	MPC0855-05	Water	03/23/06 10:50	03/24/06 19:20
06122306	MPC0855-06	Water	03/23/06 11:20	03/24/06 19:20
06122307	MPC0855-07	Water	03/23/06 11:20	03/24/06 19:20





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B Sequoia Analytical - Morgan Hill

	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Analyte	npled: 03/23/06 08:00				- Daten	Tropulou		Monod	
06122301 (MPC0855-01) Water Sam									·
Diesel Range Organics (C10-C28)	10000	940	ug/l	20	6C29044	03/29/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		394 %	30-	115	"	n	"	#	S04
06122302 (MPC0855-02) Water Sam	npled: 03/23/06 08:40	Receive	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	4300	960	ug/l	20	6C29044	03/29/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		96 %	30-	115	"	"	"	n	
06122303 (MPC0855-03) Water San	npled: 03/23/06 09:30	Receive	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	130	47	ug/l	1	6C29044	03/29/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		84 %	30-	115	"	"	"	n	
06122304 (MPC0855-04) Water Sam	npled: 03/23/06 10:20	Receive	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	430	47	ug/l	1	6C30036	03/30/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		72 %	30-	115	"	"	"	"	
06122305 (MPC0855-05) Water San	npled: 03/23/06 10:50	Receive	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	53	47	ug/l	1	6C30036	03/30/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		56 %	30-	115	"	n	**	"	
06122306 (MPC0855-06) Water San	npled: 03/23/06 11:20	Receive	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	2300	470	ug/l	10	6C30036	03/30/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		91 %	30-	-115	"	H	"	n	
06122307 (MPC0855-07) Water Sar	mpled: 03/23/06 11:20	Receiv	ed: 03/24	/06 19:20					
Diesel Range Organics (C10-C28)	2300	470	ug/l	10	6C30036	03/30/06	04/06/06	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		78 %	30-	-115	"	"	"	"	





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Morgan Hill

	F	eporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06122301 (MPC0855-01) Water San	mpled: 03/23/06 08:00	Receive	ed: 03/24/0	06 19:20					
Gasoline Range Organics (C4-C12)	79000	5000	ug/l	100	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	6000	50	11	17	"	**	n	,,	
Toluene	4300	50	H	H	**	"	"	**	
Ethylbenzene	5300	50	**	"	"	"	H	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	**	
1,2-Dibromoethane (EDB)	ND	50							
Surrogate: 1,2-Dichloroethane-d4		94 %	80-1		"	n	#	"	
Surrogate: 4-Bromofluorobenzene		88 %	60-1	15	"	"	"	"	
Surrogate: Dibromofluoromethane		95 %	85-1	30	"	"	"	"	
Surrogate: Toluene-d8		97%	70-1	30	"	"	"	"	
06122301 (MPC0855-01RE1) Water	Sampled: 03/23/06 0	8:00 Re	eceived: 03	3/24/06 19	P:20				
Xylenes (total)	23000	250	ug/l	500	6D06008	04/06/06	04/06/06	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		97 %	80-1	35	"	"	**	"	
Surrogate: 4-Bromofluorobenzene		89 %	60-1	15	n	"	"	"	
Surrogate: Dibromofluoromethane		102 %	85-1	30	"	"	"	"	
Surrogate: Toluene-d8		95 %	70-1	30	"	"	"	"	
06122302 (MPC0855-02) Water San	mpled: 03/23/06 08:40	Receiv	ed: 03/24/	06 19:20					
Gasoline Range Organics (C4-C12)	7600	500	ug/l	10	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	110	5.0	**	**	"	"	"	11	
Toluene	ND	5.0	19	**	н	"	11	11	
Ethylbenzene	250	5.0	н	11	"	11	H	H	
Xylenes (total)	36	5.0	"	"	11	Ħ	"	**	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	11	"	**	н		"	
Surrogate: 1,2-Dichloroethane-d4		98 %	80-1		#	"	"	"	
Surrogate: 4-Bromofluorobenzene		91 %	60-1	115	"	"	"	"	
Surrogate: Dibromofluoromethane		98 %	85-1	130	"	"	"	#	
Surrogate: Toluene-d8		102 %	70-1	130	"	"	"	"	





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Morgan Hill

Analyte	I Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06122303 (MPC0855-03) Water	Sampled: 03/23/06 09:30	Receive	ed: 03/24/06	19:20					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	ND	0.50	*	**	11	H	11	n	
Toluene	ND	0.50	н	**	H	**	"	**	
Ethylbenzene	ND	0.50		37	"	**	11	**	
Xylenes (total)	ND	0.50	**	11	**	**	H	17	
1,2-Dichloroethane	ND	0.50	If	**	11	"	W	17	
1,2-Dibromoethane (EDB)	ND	0.50	IT	"	"		**	11	
Surrogate: 1,2-Dichloroethane-d4		94 %	80-13	5	"	**	"	"	
Surrogate: 4-Bromofluorobenzene		91 %	60-11	5	"	"	"	"	
Surrogate: Dibromofluoromethane		103 %	85-13	0	"	"	"	"	
Surrogate: Toluene-d8		102 %	70-13	0	"	"	"	"	
06122304 (MPC0855-04) Water	Sampled: 03/23/06 10:20	Receive	ed: 03/24/0	5 19:20					
Gasoline Range Organics (C4-C1	2) 640	50	ug/l	1	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	1.1	0.50	II	н	**	"	"	H	
Toluene	ND	0.50	11	**	H	19	**	"	
Ethylbenzene	0.63	0.50	**	"	**	11	19	11	
Xylenes (total)	ND	0.50	"	"	**	**	It	11	
1,2-Dichloroethane	ND	0.50	"	17	**	"	n	11	
1,2-Dibromoethane (EDB)	ND	0.50	11	**	"	"	"	H	
Surrogate: 1,2-Dichloroethane-d4		114%	80-13	5	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91 %	60-11	5	"	"	"	"	
Surrogate: Dibromofluoromethane		98 %	85-13	0	"	"	"	"	
Surrogate: Toluene-d8		102 %	70-13	0	"	"	"	"	





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	F Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06122305 (MPC0855-05) Water	Sampled: 03/23/06 10:50	Receive	ed: 03/24/0	6 19:20					
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	ND	0.50	11	"	11	**	"	"	
Toluene	ND	0.50	11	11	н	**	**	**	
Ethylbenzene	ND	0.50	**	11	н	"	**	**	
Xylenes (total)	ND	0.50	**	"	**	"	11	11	
1,2-Dichloroethane	ND	0.50	11	"	**	17	11	If	
1,2-Dibromoethane (EDB)	ND	0.50	H	"	.,	U	17	11	
Surrogate: 1,2-Dichloroethane-d4		90 %	80-1	35	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		90 %	60-1	15	"	"	"	"	
Surrogate: Dibromofluoromethane		100 %	85-1	30	"	"	n	"	
Surrogate: Toluene-d8		103 %	70-1	30	"	"	"	n	
06122306 (MPC0855-06) Water	Sampled: 03/23/06 11:20	Receiv	ed: 03/24/0	6 19:20					
Gasoline Range Organics (C4-C1	2) 3200	100	ug/l	2	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	1.1	1.0	11	н	**	H	**	•	
Toluene	1.1	1.0	11	Ħ	**	17	11	11	
Ethylbenzene	83	1.0	11	**	H	H	n	"	
Xylenes (total)	58	1.0	ij	**	"	"	H	H	
1,2-Dichloroethane	ND	1.0	н	11	11	Ħ	н	н	
1,2-Dibromoethane (EDB)	ND	1.0	Ħ	11	11	"	u		
Surrogate: 1,2-Dichloroethane-d4		116%	80-1	35	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97%	60-1	15	"	"	"	"	
Surrogate: Dibromofluoromethane		100 %	85-1	30	"	"	n	"	
Surrogate: Toluene-d8		101 %	70-1	30	#	"	"	"	





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
06122307 (MPC0855-07) Water	Sampled: 03/23/06 11:20	Receive	ed: 03/24/0	06 19:20					···
Gasoline Range Organics (C4-C12	3900	250	ug/l	5	6D05022	04/05/06	04/06/06	EPA 8260B	
Benzene	ND	2.5	"	11	*1	Ħ	**	**	
Toluene	ND	2.5	"	n	"	"	11	H	
Ethylbenzene	94	2.5	**	R	"	**	11	"	
Xylenes (total)	63	2.5	"	"	"	**	Ħ	"	
1,2-Dichloroethane	ND	2.5	11	"	**	**	**	tt .	
1,2-Dibromoethane (EDB)	ND	2.5		11	n	11	"		
Surrogate: 1,2-Dichloroethane-d4		101 %	80-1	35	"	"	"	n	
Surrogate: 4-Bromofluorobenzene		95 %	60-1	15	"	"	"	"	
Surrogate: Dibromofluoromethane		99 %	85-1	30	"	"	"	**	
Surrogate: Toluene-d8		101 %	70-1	30	"	"	"	"	





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B - Quality Control Sequoia Analytical - Morgan Hill

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 6C29044 - EPA 3510C / EP.	A 8015B-SVOA									
Blank (6C29044-BLK1)				Prepared:	03/29/06	Analyzed	1: 04/05/06			
Diesel Range Organics (C10-C28)	ND	50	ug/l							×
Surrogate: n-Octacosane	37.1		"	50.0		74	30-115			
Laboratory Control Sample (6C29044	I-BS1)			Prepared:	03/29/06	Analyzed	1: 04/05/06			
Diesel Range Organics (C10-C28)	336	50	ug/l	500		67	40-140			
Surrogate: n-Octacosane	42.6		н	50.0		85	30-115			
Laboratory Control Sample Dup (6C	29044-BSD1)			Prepared:	03/29/06	Analyzed	1: 04/05/06			QM1
Diesel Range Organics (C10-C28)	348	50	ug/l	500		70	40-140	4	35	
Surrogate: n-Octacosane	41.0		11	50.0		82	30-115			
Batch 6C30036 - EPA 3510C / EP	A 8015B-SVOA		· · · · · · · · · · · · · · · · · · ·							
Blank (6C30036-BLK1)				Prepared:	03/30/06	Analyze	d: 04/06/06			
Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: n-Octacosane	40.2		n	50.0		80	30-115			
Laboratory Control Sample (6C3003	6-BS1)			Prepared:	: 03/30/06	Analyze	d: 04/06/06			
Diesel Range Organics (C10-C28)	339	50	ug/l	500		68	40-140			
Surrogate: n-Octacosane	40.2		"	50.0		80	30-115			
Laboratory Control Sample Dup (6C	30036-BSD1)			Prepared	: 03/30/06	Analyze	d: 04/06/06			QM1
Diesel Range Organics (C10-C28)	347	50	ug/l	500		69	40-140	2	35	
Surrogate: n-Octacosane	39.1		"	50.0		78	30-115			
5										





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6D05022 - EPA 5030B P/T	/ EPA 8260B									
Blank (6D05022-BLK1)				Prepared	& Analyz	ed: 04/05/	06			
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Benzene	ND	0.50	н							
Toluene	ND	0.50	17							
Ethylbenzene	ND	0.50	17							
Xylenes (total)	ND	0.50	11							
1,2-Dichloroethane	ND	0.50	17							
1,2-Dibromoethane (EDB)	ND	0.50	**							
Surrogate: 1,2-Dichloroethane-d4	4.66		"	5.00		93	80-135			
Surrogate: 4-Bromofluorobenzene	4.33		"	5.00		87	60-115			
Surrogate: Dibromofluoromethane	5.07		"	5.00		101	85-130			
Surrogate: Toluene-d8	5.08		"	5.00		102	70-130			
Laboratory Control Sample (6D0502	2-BS1)			Prepared	& Analyz	ed: 04/05/	06			
Gasoline Range Organics (C4-C12)	417	50	ug/l	440		95	75-140			
Benzene	5.78	0.50	**	5.04		115	70-125			
Toluene	35.0	0.50	11	38.0		92	70-120			
Ethylbenzene	7.29	0.50	11	7.28		100	80-130			
Xylenes (total)	41.8	0.50	11	40.8		102	85-125			
1,2-Dichloroethane	15.5	0.50	**	15.5		100	75-125			
1,2-Dibromoethane (EDB)	15.7	0.50	11	16.6		95	85-125			
Surrogate: 1,2-Dichloroethane-d4	4.64		"	5.00		93	80-135			
Surrogate: 4-Bromofluorobenzene	4.60		n	5.00		92	60-115			
Surrogate: Dibromofluoromethane	4.72		"	5.00		94	85-130			
Surrogate: Toluene-d8	4.99		"	5.00		100	70-130			
Matrix Spike (6D05022-MS1)	Source: M	IPC0855-01		Prepared:	04/05/06	Analyzed	1: 04/06/06	5		
Gasoline Range Organics (C4-C12)	124000	5000	ug/l	44000	79000	102	75-140			
Benzene	6270	50	"	504	6000	54	70-125			QM
Toluene	8210	50	**	3800	4300	103	70-120			
Ethylbenzene	5800	50	11	728	5300	69	80-130			QM
Xylenes (total)	6590	50	*	4080	6000	14	85-125			QM
1,2-Dichloroethane	1530	50	**	1550	ND	99	75-125			
1,2-Dibromoethane (EDB)	1610	50	"	1660	ND	97	85-125			
Surrogate: 1,2-Dichloroethane-d4	4.58	-,	"	5.00		92	80-135			
Surrogate: 4-Bromofluorobenzene	4.61		n	5.00		92	60-115			
Surrogate: Dibromofluoromethane	4.73		"	5.00		95	85-130			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Toluene 7410 50 " 3800 4300 82 70-120 10 15 Ethylbenzene 5650 50 " 728 5300 48 80-130 3 15 QM05			Reporting		Spike	Source		%REC		RPD	
Matrix Spike (6D05022-MS1) Source: MPC0855-01 Prepared: 04/05/06 Analyzed: 04/06/06 Surrogate: Tokene-d8 5.00 ug/l 5.00 100 70-130 Matrix Spike Dup (6D05022-MSD1) Source: MPC0855-01 Prepared: 04/05/06 Analyzed: 04/06/06 Compared: 04/05/06 Analyzed: 04/06/06 Gasoline Range Organics (C4-C12) 115000 5000 ug/l 44000 79000 82 75-140 8 20 Benzene 5910 50 " 504 6000 0 70-125 6 15 QM03 Cloudene 7410 50 " 3800 4800 80-130 3 15 QM03 Ethylbenzene 5650 50 " 728 5300 48 80-130 3 15 QM03 Xylenes (total) 6560 50 " 4080 6000 14 85-125 0.5 15 QM03 1,2-Dichloroethane (EDB) 1530 50 " 1660 ND 92 85-125 5 15<	Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Surrogate: 10-luene-d8 5.00 ug/l 5.00 100 70-130 70-	Batch 6D05022 - EPA 5030B P/T / E	EPA 8260B								A ****	
Matrix Spike Dup (6D05022-MSD1) Source: MPC0855-01 Prepared: 04/05/06 Analyzed: 04/06/06 Gasoline Range Organics (C4-C12) 115000 5000 ug/l 44000 79000 82 75-140 8 20 Benzene 5910 50 " 3604 6000 0 70-125 6 15 QM03 Toluene 7410 50 " 3800 4300 82 70-120 10 15 Ethylbenzene 5650 50 " 4080 6000 14 85-125 0.5 15 QM03 Xylenes (total) 6560 50 " 4080 6000 14 85-125 0.5 15 QM03 Xylenes (total) 6560 50 " 4080 6000 14 85-125 0.5 15 QM03 1,2-Dichlorocethane 1450 50 " 1550 ND 94 75-125 5 10 Surrogate: A-Bromofluoromethane 4.63	Matrix Spike (6D05022-MS1)	Source: M	IPC0855-01		Prepared:	04/05/06	Analyze	d: 04/06/06			
Sasoline Range Organics (C4-C12) 115000 5000 ug/l 44000 79000 82 75-140 8 20	Surrogate: Toluene-d8	5.00		ug/l	5.00		100	70-130			
Benzene S910 S0 " S04 6000 0 70-125 6 15 QM03	Matrix Spike Dup (6D05022-MSD1)	Source: M	IPC0855-01		Prepared:	04/05/06	Analyze	d: 04/06/06			
Toluene 7410 50 " 3800 4300 82 70-120 10 15 Ethylbenzene 5650 50 " 728 5300 48 80-130 3 15 QM03 Xylenes (total) 6560 50 " 4080 6000 14 85-125 0.5 15 QM02 1,2-Dichloroethane 1450 50 " 1550 ND 94 75-125 5 10 1,2-Dichloroethane (EDB) 1530 50 " 1660 ND 92 85-125 5 15 Surrogate: 1,2-Dichloroethane-44 4.39 " 5.00 88 80-135 Surrogate: 4-Bromofluorobenzene 4.49 " 5.00 90 661-15 Surrogate: 7-Diuene-48 4.88 " 5.00 98 70-130 Batch 6D06008-BLK1) Prepared & Analyzed: 04/06/06 Bank (6D06008-BLK1) Prepared & Analyzed: 04/06/06 Sourogate: 1-Dibromocthane (C4-C12) ND 0.50 " Toluene ND 0.50 " Toluene ND 0.50 " Xylenes (total) ND 0.50 " Xylenes (total) ND 0.50 " Xylenes (total) ND 0.50 " Surrogate: 4-Bromofluorobenzene A.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene A.43 " 5.00 94 70-120 Surrogate: 1-Dichloroethane (EDB) ND 0.50 " Surrogate: 4-Bromofluorobenzene A.69 " 5.00 94 70-120 Surrogate: 1-Bromofluorobenzene A.69 " 5.00 94 70-120 Surrogate: 1-Dibromofluoromethane A.43 " 5.00 96 65-130	Gasoline Range Organics (C4-C12)	115000	5000	ug/l	44000	79000	82	75-140	8	20	
Ethylbenzene 5650 50 " 728 5300 48 80-130 3 15 QM005 Xylenes (total) 6560 50 " 4080 6000 14 85-125 0.5 15 QM005 1,2-Dichloroethane 1450 50 " 1550 ND 94 75-125 5 10 1,2-Dichloroethane (EDB) 1530 50 " 1660 ND 92 85-125 5 15	Benzene	5910	50	**	504	6000	0	70-125	6	15	QM05
Xylenes (total)	Toluene	7410	50	11	3800	4300	82	70-120	10	15	
1,2-Dichloroethane	Ethylbenzene	5650	50	H	728	5300	48	80-130	3	15	QM05
1,2-Dibromoethane (EDB) 1530 50 " 1660 ND 92 85-125 5 15 1,2-Dibromoethane-d4 4.39 " 5.00 88 80-135 2,2-Dibromoethane-d4 4.39 " 5.00 90 60-115 3,2-Dibromofluorobenzene 4.49 " 5.00 93 85-130 3,5-Dibromofluoromethane 4.65 " 5.00 98 70-130 3,5-Dibromofluoromethane 4.65 " 5.00 98 70-130 3,5-Dibromofluoromethane 5.00 98 70-130 3,5-Dibromofluoromethane 70-130 4,88 " 5.00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 70-130 5,00 98 60-135 5,00 94 70-120 5,00 5,00 94 70-120 5,00 5,00 96 65-130 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,00 5,	Xylenes (total)	6560	50		4080	6000	14	85-125	0.5	15	QM02
Surrogate: 1,2-Dichloroethane-d4	1,2-Dichloroethane	1450	50	**	1550	ND	94	75-125	5	10	
Surrogate: 4-Bromofluorobenzene	1,2-Dibromoethane (EDB)	1530	50	11	1660	ND	92	85-125	5	15	
Surrogate: Dibromofluoromethane 4.65 " 5.00 93 85-130	Surrogate: 1,2-Dichloroethane-d4	4.39		"	5.00		88	80-135			
Surrogate: Toluene-d8	Surrogate: 4-Bromofluorobenzene	4.49		"	5.00		90	60-115			
Blank (6D06008 - EPA 5030B P/T / EPA 8260B	Surrogate: Dibromofluoromethane	4.65		"	5.00		93	85-130			
Prepared & Analyzed: 04/06/06	Surrogate: Toluene-d8	4.88		"	5.00		98	70-130			
Gasoline Range Organics (C4-C12) Benzene ND 0.50 Toluene ND 0.50 Ethylbenzene ND 0.50 Xylenes (total) 1,2-Dichloroethane ND 0.50 ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 Surrogate: 4-Bromofluorobenzene 4.69 Surrogate: Dibromofluoromethane 4.79 ND 0.50 " 5.00 96 65-130	Batch 6D06008 - EPA 5030B P/T / I	EPA 8260B									
Gasoline Range Organics (C4-C12) ND 50 ug/l Benzene ND 0.50 " Toluene ND 0.50 " Ethylbenzene ND 0.50 " Xylenes (total) ND 0.50 " 1,2-Dichloroethane ND 0.50 " 1,2-Dibromoethane (EDB) ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	Blank (6D06008-BLK1)				Prepared	& Analyz	ed: 04/06	/06			
Toluene ND 0.50 " Ethylbenzene ND 0.50 " Xylenes (total) ND 0.50 " 1,2-Dichloroethane (EDB) ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130		ND	50	ug/l							
Ethylbenzene ND 0.50 " Xylenes (total) ND 0.50 " 1,2-Dichloroethane (EDB) ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	Benzene	ND	0.50	н							
Ethyloenzene ND 0.50 Xylenes (total) ND 0.50 " 1,2-Dichloroethane ND 0.50 " 1,2-Dibromoethane (EDB) ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	Toluene	ND	0.50	*							
1,2-Dichloroethane ND 0.50 " 1,2-Dibromoethane (EDB) ND 0.50 " Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	Ethylbenzene	ND	0.50	"							
1,2-Dichloroethane ND 0.50 1,2-Dibromoethane (EDB) ND 0.50 Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	Xylenes (total)	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4 4.43 " 5.00 89 60-135 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	1,2-Dichloroethane	ND	0.50	**							
Surrogate: 1,2-Dichloroethane-a4 4.43 5.00 69 00-133 Surrogate: 4-Bromofluorobenzene 4.69 " 5.00 94 70-120 Surrogate: Dibromofluoromethane 4.79 " 5.00 96 65-130	1,2-Dibromoethane (EDB)	ND	0.50	11							
Surrogate: 4-Bromofluoromethane 4.79 " 5.00 96 65-130	Surrogate: 1,2-Dichloroethane-d4	4.43		**	5.00		89	60-135			
Suit of Suite. Distribution of the manual of the suite of	Surrogate: 4-Bromofluorobenzene	4.69		"	5.00		94	70-120			
Surrogate: Toluene-d8 4.91 " 5.00 98 70-120	Surrogate: Dibromofluoromethane	4.79		"	5.00		96	65-130			
	Surrogate: Toluene-d8	4.91		"	5.00		98	70-120			





Project:Parking Garage 9 Santa Rosa Project Number: 4088053173.01 Project Manager: Gary Lieberman

MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6D06008 - EPA 5030B P/T / E	PA 8260B									
Laboratory Control Sample (6D06008-B				Prepared	& Analyz	ed: 04/06/	06			
Gasoline Range Organics (C4-C12)	413	50	ug/l	440		94	60-140			
Benzene	5.60	0.50	**	5.04		111	65-115			
Toluene	34.7	0.50	**	38.0		91	85-120			
Ethylbenzene	7.33	0.50	"	7.28		101	75-135			
Xylenes (total)	42.0	0.50	11	40.8		103	85-125			
1,2-Dichloroethane	15.9	0.50	**	15.5		103	85-130			
1,2-Dibromoethane (EDB)	16.6	0.50	"	16.6		100	85-120			
Surrogate: 1,2-Dichloroethane-d4	4.38		"	5.00		88	60-135			
Surrogate: 4-Bromofluorobenzene	4.55		"	5.00		91	70-120			
Surrogate: Dibromofluoromethane	4.60		"	5.00		92	65-130			
Surrogate: Toluene-d8	4.79		"	5.00		96	70-120			
Matrix Spike (6D06008-MS1)	Source: M	IPC0965-06		Prepared	& Analyz	ed: 04/06/	06			
Gasoline Range Organics (C4-C12)	2360	250	ug/l	2200	46	105	60-140			
Benzene	29.4	2.5	17	25.2	ND	117	65-115			QM0
Toluene	177	2.5	"	190	ND	93	85-120			
Ethylbenzene	37.0	2.5	"	36.4	ND	102	75-135			
Xylenes (total)	204	2.5	"	204	ND	100	85-125			
1,2-Dichloroethane	82.4	2.5	"	77.6	ND	106	85-130			
1,2-Dibromoethane (EDB)	86.0	2.5	"	83.2	ND	103	85-120			
Surrogate: 1,2-Dichloroethane-d4	5.04		"	5.00		101	60-135			
Surrogate: 4-Bromofluorobenzene	4.48		"	5.00		90	70-120			
Surrogate: Dibromofluoromethane	5.06		"	5.00		101	65-130			
Surrogate: Toluene-d8	5.12		"	5.00		102	70-120			
Matrix Spike Dup (6D06008-MSD1)	Source: M	IPC0965-06		Prepared	& Analyz	ed: 04/06/	′06			
Gasoline Range Organics (C4-C12)	2280	250	ug/l	2200	46	102	60-140	3	25	
Benzene	29.4	2.5	н	25.2	ND	117	65-115	0	20	QM0
Toluene	177	2.5	**	190	ND	93	85-120	0	20	
Ethylbenzene	37.9	2.5	"	36.4	ND	104	75-135	2	15	
Xylenes (total)	215	2.5	**	204	ND	105	85-125	5	20	
1,2-Dichloroethane	81.6	2.5	н	77.6	ND	105	85-130	1	20	
1,2-Dibromoethane (EDB)	83.0	2.5	"	83.2	ND	100	85-120	4	15	
Surrogate: 1,2-Dichloroethane-d4	4.71		"	5.00		94	60-135			
Surrogate: 4-Bromofluorobenzene	4.63		"	5.00		93	70-120			
Surrogate: Dibromofluoromethane	4.83		"	5.00		97	65-130			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.





Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager:Gary Lieberman MPC0855 Reported: 04/10/06 14:33

Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch 6D06008 - EPA 5030B P/T / EPA 8260B

Matrix Spike Dup (6D06008-MSD1)	Source: MPC0965-06		Prepared & A	nalyzed: 04/06/	06	
Surrogate: Toluene-d8	4.80	ug/l	5.00	96	70-120	





MACTEC Engineering & Consulting [Petaluma] 5341 Old Redwood Highway, Suite 300 Petaluma CA, 94954

Project:Parking Garage 9 Santa Rosa Project Number:4088053173.01 Project Manager: Gary Lieberman

MPC0855 Reported: 04/10/06 14:33

Notes and Definitions

S04	The surrogate recovery for this sample is above control limits due to interference from the sample matrix.
QM11	A matrix spike and/or matrix spike duplicate could not be performed due to insufficient sample amount.
QM05	The spike recovery was below control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
QM02	The spike recovery was below control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM01	The spike recovery was above control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
HC-12	Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TIANGLE CENAL

Laboratory Copy

Project Office Copy

Field or Office Copy

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Refer			DATE Received at Lab:	2/23/04		(Drinking water) for	ter) for
REC. BY (PRINT)		. 4	TIME Received at Lab:	1240	1 1	regulatory purposes:	rposes: YES/NO
WORKORDER: "MP	NPC 0855	_	LOG IN DATE:	3/23/06	ł	(Wastewater) for) for
						regulatory purposes:	rposes: YES/NO
CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE#	Dash #	CLIENT ID	CONTAINER DESCRIPTION DH	SAMPLE MATRIX	DATE SAMPLED	COMMENTS /
			OHE. Dr	**	ţ		
1. Custody Seal(s) Present / Absent			06122301	47176 & SNAH	\mathcal{Z}	3/23/06	
Intact / Broken*			2			-	
2. Chain-of-Custody Present Absent*			W				
			4				
Present (Absent)			5				
5. Airbill #:			6				
6. Sample Labels: (Fresend / Absent			7	<	<	€	
op-Chain-of-Custody							
8. Sample Condition: (Intact// Broken*/		_					
Leaking*							
9. Does information on custody reports,						\	
traffic reports, and sample		_					
labels agree? (Yes)/ No*							
ved within							
hold time: Yes/ No*				7			
11. Proper Preservatives							
used: (Yes// No*							
12. Temperature Blank Received? Yes (No.							
	s C						
samples							
requiring thermal pres.:4+/-2°C) Yes/I No*							
than 4 days ago? Yes 1/No							

Sample Receipt Log Revision 2.2 (8/30/04) Replaces Revision 2.1 (11/10/00) Effective 9/1/04

*If Circled, contact Project Manager and attach record of resolution.

FIGURE 6b

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SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

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		D DE DE DE		distribution of the same	THE REPORT OF THE PARTY OF THE		The state of	4		or Problem COC
								T	METALS / DFF ON ICE	**Exception (if any): METALS /
							1		oles requiring thermal pres.)	(Acceptance range for samples requiring thermal pres.)
							1		4 +/-2°C? (Yes/ No**	Is corrected temp 4 +/-2°C?
							1		M	Corrected Temp:
									6.80	14. Read Temp:
									Yes/ No?	(circle which, if yes)
									Blank Received?	13. Trip Blank / Temp Blank Received?
									es used? (Yes / No*	12. Proper preservatives used?
									(769 / No*	received?
										11. Adequate sample volume
									*oN/86X)	hold time?
					10				ithin	10. Sample received within
					1				(YS&/No*	agree?
					12/10/				d sample labels	traffic reports and sample labels
				10	22				Does information on chain-of-custody,	9. Does information
				7					Leaking*	
									Cintect / Broken* /	8. Sample Condition:
									on Chain-of-Custody	
									Lieted / Not Listed	
									(Present / Absent	
										5. Airbill #:
									Present (Absent	
									Airbill / Sticker	4. Airbill:
									Present Absent	Packing List:
),),	3. Traffic Reports or
									Present / Absent*	2. Chain-of-Custody
									Intact / Broken*	
									Present / Absent	1. Custody Seal(s)
CONDITION (ETC.)	SAMPLED	MATRIX	рH	ATIVE	DESCRIPTION	CLIENT ID	DASH #	LAB SAMPLE#	CIRCLE THE APPROPRIATE RESPONSE	CIRCLE THE APP
DEMARKS.	DATE	e land			-1					
ATER YES/NO	WASTE WATER					DATE LOGGED IN:	• .		•	WORKORDER:
9	DRINKING WATER		-		12:01	TIME REC'D AT LAB:	• '		(P)	REC. BY (PRINT)
ਲੂ	For Regula				دما	DATE REC'D AT LAB:		Mastel	M-coess-M	CLIENT NAME:

SRL Revision 7 Replaces Rev 5 (07/13/04) Effective 07/19/05